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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,065	10/04/2000	Peter Coad	30013630-0003	8737
23485	7590	06/03/2004	EXAMINER	
JINAN GLASGOW			CHUONG, TRUC T	
P O BOX 28539			ART UNIT	
RALEIGH, NC 276118539			PAPER NUMBER	

2174

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,065

Applicant(s)

COAD ET AL.

Examiner

Truc T Chuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This communication is responsive to Amendment C, filed 3/19/04.
2. Claims 1-40 are pending in this application. Claim 1, 6, 13, 17, 22, 29, 33, and 40 are independent claims. In Amendment C, claims 1, 2, 6, 11, 14, 15, 17, 27, 29, 30, 31, and 38 are amended. This action is made non-final.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Per Cederqvist et al. (Version Management with CVS for CVS 1.11.3, 1992,1993).

As to claim 1, Per Cederqvist teaches a method in a data processing system for displaying versions of source code, each version reflecting an instance in an edit history (1.1 What is CVS, page 3), the method comprising the steps of.

determining a language of the source code (1.3.1 Getting the source, page 6, .c files (backend.c, driver.c, ...) indicate that these source codes were written in C program);

storing indications of the edits to the source code (1.3.2 Committing your changes, page 6, and 1.3.4 Viewing differences, page 7);

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converting the source code with the indications of the edits from the language into a language-neutral representation (10.3 Conflicts example, page 62-64, shows differences between old and modified versions of the program file, and 5.3 Accessing branches show different version numbers, pages 42-44);

using the language-neutral representation to display the converted the source code (a user can use an Emacs package called emerge to help the user resolves conflicts, page 64; therefore, to be able to solve the conflicts of the codes or versions, CVS must be somehow view the source code with warning comments or debugging messages to help the user solving the conflicts of the codes) with the indications of the edits (>>>> and <<<<<, pages 62-63, indicate modified part of the code, and 5.3 Accessing branches show different version numbers, pages 42-44); and using the language-neutral representation to display a corresponding graphical representation of the source code (Per Cederqvist teaches a graphical user interface for operations because CVS can be run on different platforms including Windows NT/95, 2.2.3 File Permission issues specific to Windows, page 12, and Per Cederqvist clearly shows editing environments are VARY with user operating systems such as: vi editor for UNIX or Notepad editor for Windows NT/95, 1.3.2 Committing your changes, page 6. Notepad and other editors of Windows NT/95 are clearly graphical representations because they are used to view and edit source code with multiple control icons for users to select from.) with the indications of the edits (>>>> and <<<<<, pages 62-63, indicate modified part of the code, and 5.3 Accessing branches show different version numbers, pages 42-44) wherein the graphical representation of the converted source code is not merely a text representation on a user interface (Notepad and other graphical

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representations are not only displayed the source code in text, but also provide multiple control icons for users to select from; >>>> and <<<<< are not either an alphanumeric or text display).

As to claim 11, it is individually similar in scope to claim 1 above; therefore, rejected under similar rationale.

As to claim 2, Per Cederqvist teaches the method of claim 1, wherein the source code and the corresponding graphical representation of the converted source code (see the rejection of converted source code of claim 1 above) are displayed sequentially (\$CVSROOT, page 11).

As to claims 3 and 8, Per Cederqvist inherently teaches the method of claim 1 wherein a rate at which the source code with the indications of the edits is displayed is adjustable because any editing screens of Microsoft Windows can be resized (adjustable) minimized, or maximized.

As to claims 4 and 9, Per Cederqvist teaches the method of claim 1, wherein the source code with the indications of the edits is displayed in reverse order (10.2 Bringing a file up to date, page 61, in first paragraph shows the newest revision of the file is extracted from the repository and put in working directory).

As to claims 5 and 12, Per Cederqvist teaches the method of claim 1, wherein the graphical representation is one of the group consisting of a user case diagram, a sequence diagram (history files for each version control, page 11), a collaboration diagram, a state transition diagram, an activity diagram, a package diagram, a component diagram and a deployment diagram.

As to claim 6, Per Cederqvist teaches a method in a data processing system for displaying versions of source code, each version reflecting an instance in an edit history, the method comprising the steps of:

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storing indications of the edits to the source code (page 63); and

displaying the versions of the source code with the indications of the edits (history files, page 11) wherein the source code is represented graphically on a user interface in a language-neutral representation (5.3 Accessing branches show different version numbers, pages 42-44) for showing differences in the source code over time using graphical presentation that are not merely alphanumeric or text-based display (Notepad and other graphical representations are not only displayed the source code in text, but also provide multiple control icons for users to select from; >>>> and <<<< are not either an alphanumeric or text display).

As to claim 7, Per Cederqvist teaches the method of claim 6, wherein the versions of the source code are displayed sequentially (pages 45-46).

As to claims 10, 13-15, they are similar in scope to claim 1 above; therefore, rejected under similar rationale.

As to claim 16, Per Cederqvist teaches the method of claim 13, wherein the source code is displayed after the converted source code (see claim 1 for converted source code) with the edit is displayed (10.3 Conflicts example, page 62-64, display a new version 1.7 after the source code has been modified).

As to claims 17-32, these are computer program product claims of method claims 1-16. Note the rejections of claims 1-16 above respectively.

As to claim 33-37, and 39-40, these are system claims of method claims 1-4, 11, 5-6. Note the rejections of claims 1-4, 11, 5-6 above respectively.

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As to claim 38, Per Cederqvist teaches the data processing system of claim 37, wherein the memory device further comprises a transient meta model, wherein said transient meta model stores the language neutral representation of the source code (2. The Repository, page 9).

Response to Arguments

5. Applicant's arguments filed in the Amendment C have been fully considered but they are not persuasive.

Applicants argued the following:

Per Cederqvist does not disclose conversion of source code of any kind into a language-neutral format.

Examiner disagrees for the following reasons:

Per Cederqvist clearly teaches that a user can use an Emacs package called emerge to help the user resolve conflicts, page 64; therefore, to be able to solve the conflicts of the codes or versions, CVS must somehow view the source code with warning comments or debugging messages to help the user to shove the conflicts of the codes, and the indications of the edits of the source code >>>>> and <<<<<, pages 62-63, indicate modified part of the code.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T Chuong whose telephone number is 703-305-5753. The examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on 703-308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

05/25/04

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100